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EXAMINER
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BROWN, CHRISTOPHER J

ART UNIT	PAPER NUMBER
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2134

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/982,260

Filing Date: October 17, 2001

Appellant(s): LINNARTZ, JOHAN PAUL MARIE GERARD

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James D. Leimbach  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 4/17/2006 appealing from the Office action  
mailed 3/15/2006.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 1-20.

Claims 1-5, 8-20 are rejected.

Claims 6, and 7 are allowed.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

**WITHDRAWN REJECTIONS**

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. The USC 112 rejection of Claim 5 has been withdrawn by the examiner. The USC 103 rejection of claims 6, and 7 have been withdrawn by the examiner.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,915,021	HERLIN	6-1999
5,604,802	HOLLOWAY	2-1997
6,839,437	CRAINE	1-2005
6,467,663	JAISIMHA	11-2002
6,487,663	MOSKOWITZ	7-2003

**Bluetooth Specification Version 1.0B 11-1999**

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 3, 4, 9, 11-15, 17, and 19, are rejected under 35 U.S.C. 103(a) as being unpatentable over Herlin US 5,915,021 in view of Jaisimha US 6,487,663**

As per claims 1, 3, 4, 9, 14, and 15 Herlin teaches activating a communication link between devices (Col 5 lines 35-40). Herlin teaches transmitting data between devices for performing an authentication session, specifically the mobile station authenticates the base station, wherein a first key is generated, (Col 5 lines 35-48). Herlin teaches that the first authentication session generates a first key (k1), (Col 5 lines 40). Although not explicitly stated, if the first authentication fails, the procedure will not continue. Herlin teaches that a second, subsequent authentication session, specifically where the base station authenticates the mobile station, and generates a second key (k2), (Col 5 line 45). Herlin teaches that this second key is then used to communicate securely, (Col 5 line 48). Herlin does not teach transferring audio or visual content.

Jaisimha teaches a media player and media server that exchange audio or visual content, (Col 4 lines 36-42).

It would have been obvious to employ the authentication and encryption of Herlin, with the Media Player of Jaisimha because the authentication would enhance the security of the media system.

As per claim 11, Herlin teaches means for receiving information and decrypting the information using a link key, (Col 5 lines 45-50).

As per claim 12, Herlin teaches the device is portable, (Col 6 line 61).

As per claim 13, Herlin teaches the device comprises means for wireless communication, (Col 7 lines 28-45).

As per claim 17, Jaismha teaches determining a compliance level before transferring data, (Col 2 lines 43-46).

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As per claim 19, the authentication of Herlin proves that the device is trustworthy, (Col 5 lines 45-47).

Jaisimha provides for the downloading of audiovisual content (Col 4 lines 36-42).

**Claims 2, 5, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herlin US 5,915,021 in view of Jaisimha US 6,487,663 in view of Bluetooth Security Specification Version 1.0B.**

As per claims 2, 5, and 16 The previous Herlin-Jaisimha combination teaches generation of a first key and a second key. Herlin fails to teach key merging.

Bluetooth teaches using a first key and a second key and merging them in an XOR fashion to create a new link key, page 156 lines 1-3. It would have been obvious to one of ordinary skill in the art to combine the first and second keys of Herlin to create a more secure system.

**Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herlin US 5,915,021 in view of Jaisimha US 6,487,663 in view of Holloway US 5,604,802.**

As per claim 8, the previous Herlin-Jaisimha combination does not teach key merging. Holloway teaches encrypting one key with another and sending it to a recipient, (Col 9 lines 45-53). It would have been obvious to one of ordinary skill in the art to use k1 of Herlin as the key encrypting key of k2 because it is a one time key and would increase security.

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**Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herlin US 5,915,021 in view of Jaisimha US 6,487,663 in view of Crane US 6,839,437.**

As per claim 10, the previous Herlin-Jaisimha combination does not teach API's.

Crane teaches use of APIs with cryptographic operations and a common data security architecture, (Col 4 lines 19-25, 56-65).

It would have been obvious to one of ordinary skill in the art to modify the system of Herlin with the API of Crane because the API allows for greater flexibility for the design of the system.

**Claims 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herlin US 5,915,021 in view of Jaisimha US 6,487,663 in view of Moskowitz US 6,598,162**

As per claims 18, and 20, the previous Herlin-Jaisimha combination teaches authentication but does not teach limiting quality of the media.

Moskowitz teaches limiting the quality of media based on authorization rights, (Col 4 lines 35-50).

It would have been obvious to one of ordinary skill in the art to use the reduced quality media with the security of Herlin-Jaisimha because it allows for unauthorized users to sample a product before deciding to purchase it.

**(10) Response to Argument**

**II.**

Herlin teaches activating a communication link between devices (Col 5 lines 35-40).

Herlin teaches transmitting data between devices for performing an authentication session, specifically the mobile station authenticates the base station, wherein a first key is generated, (Col 5 lines 35-48). Herlin teaches that the first authentication session generates a first key (k1), (Col 5 lines 40). Although not explicitly stated, if the first authentication fails, the procedure will not continue. Herlin teaches that a second, subsequent authentication session, specifically where the base station authenticates the mobile station, and generates a second key (k2), (Col 5 line 45). Herlin teaches that this second key is then used to communicate securely, (Col 5 line 48).

Herlin does not teach transferring audio or visual content.

Jaisimha teaches a media player and media server that exchange audio or visual content, (Col 4 lines 36-42).

It would have been obvious to employ the authentication and encryption of Herlin, with the Media Player of Jaisimha because the authentication would enhance the security of the media system.

**Appealed Claim 1**

The appellant asserts that Herlin does not teach a first session key generated in a first authentication session, and generating a second session key in a subsequent authentication. The examiner disagrees. Herlin teaches a first authentication where the mobile station authenticates the base station, and then a subsequent authentication where



the base station authenticates the mobile station, (Col 5 lines 35-48). A key is generated in each instance. The appellant has also stated that there is no reasonable expectation of success using keys and an authentication process in Jaisimha. The examiner disagrees. Jaisimha is merely relied upon to teach that the content transferred may be audio or visual. The examiner notes that most communication to a mobile station, or cell phone, would be audio or visual in nature. The examiner is merely relying on Jaisimha to explicitly teach that the communication may be audio or visual, (Col 4 lines 36-42). There is nothing stated in Jaisimha that would prevent two devices from authenticating each other prior to transfer of data. As the examiner has stated in the rejection above, this authentication would actually enhance the security. MPEP 2143 states that motivation may be in knowledge generally available to one of ordinary skill in the art. The examiner asserts that one of ordinary skill in the art would recognize that authentication prior to transferring audio or visual contents would be beneficial in relation to security of that audio or visual content.

### **Appealed Claim 3**

The appellant argues that Herlin in view of Jaisimha does not teach that the authentications are independent of each other. The examiner asserts that each authentication, the Base station authenticating the mobile station, and the mobile station authenticating the base station, are independent processes and performed independent of each other.

### **Appealed Claim 4**

The appellant argues that Herlin in view of Jaisimha does not teach that “additional data” is sent between the devices for deciding whether or not to proceed with subsequent authentication. The examiner asserts that additional data, such as a key, is sent in addition to authentication data “triplets” to decide whether to proceed with subsequent authentication.

### **Appealed Claim 9**

The appellant argues that Herlin in view of Jaisimha does not teach activating a communication link, transmitting data and performing authentication, and subsequent authentication sessions. Herlin teaches a first authentication where the mobile station authenticates the base station, and then a subsequent authentication where the base station authenticates the mobile station.

**Appealed Claim 11**

The appellant argues that Herlin in view of Jaisimha does not teach a device receiving information decrypting and storing said information.

The examiner argues that Herlin teaches using a link key to communicated securely.

This inherently covers the process of encryption and decryption. Herlin also teaches that the devices send and store information in the authentication process, so the devices have the means for accepting and recording information

**Appealed Claim 12**

The appellant argues that Herlin in view of Jaisimha does not teach a portable device.

The examiner asserts that Herlin teaches a mobile station, or a portable device. The clause “e.g. a headphone or a walkman” are not given patentable weight because they are claimed only as examples of a portable device.

**Appealed Claim 13**

The appellant argues that Herlin in view of Jaisimha does not teach short range wireless data communication. The examiner asserts that Herlin does teach short range wireless data communication, in that Herlin teaches a mobile telephone system.

**Appealed Claim 14**

The appellant argues that Herlin in view of Jaisimha does not teach a signal comprising data transmitted between the devices wherein the data is used for performing

authentication sessions for authenticating the devices. The examiner asserts that the signal comprising data transmitted between devices is used for performing authentication sessions, for example the triplet values, to verify the certificate of the device.

**Appealed Claim 15**

The appellant argues that Herlin in view of Jaisimha does not teach a first key and a second key obtained after performing the method of claim 1. The examiner asserts that the signal comprises exchanging keys including the first and second key after performing the method of claim 1.

**Appealed Claim 17**

The appellant argues that Herlin in view of Jaisimha does not teach determining a compliance level before transferring audio or visual content. The examiner asserts that the process of authentication used in Herlin in view of Jaisimha determines a level of compliance. The devices authenticate each other to determine a level of trust, and if authenticated, transfer the audio and visual data.

**Appealed Claim 19**

The appellant argues that Herlin in view of Jaisimha does not teach a device proves it is allowed to download content. The examiner asserts that the process of authentication used in Herlin in view of Jaisimha determines a level of compliance which is used to

prove it is allowed to download content. Herlin in view of Jaisimha also explicitly teaches downloading of said content.

### **Appealed Claim 20**

The appellant argues that Herlin in view of Jaisimha does not teach claim 20, however the argument is moot, as the examiner did not reject claim 20 under this combination.

### **III.**

### **Appealed Claim 2**

The appellant argues that Herlin in view of Jaisimha in view of Bluetooth Security specification Version 1.0B does not teach for generating a link key for encryption and decryption for data communication by merging the first key with the second key

The examiner asserts that Herlin in view of Jaisimha in view of Bluetooth teaches using a first key and a second key and merging them in an XOR fashion to create a new link key.

The Bluetooth specification is merely relied on for this key combination method. The key combination method would be obvious to one of ordinary skill in the art because by combining both keys the security of the link key is enhances, ie. if one key is captured over the network, it cannot be used to compromise the system.

### **Appealed Claim 5**

The appellant argues that Herlin in view of Jaisimha in view of Bluetooth Security specification Version 1.0B

The appellant argues that Herlin in view of Jaisimha in view of Bluetooth Security specification Version 1.0B does not teach an authentication session

The examiner asserts that Herlin in view of Jaisimha in view of Bluetooth does teach a possible first authentication session, that would benefit the previous Herlin-Jaisimha combination when using the Bluetooth protocol.

#### **Appealed Claim 16**

The appellant argues that Herlin in view of Jaisimha in view of Bluetooth Security specification Version 1.0B

The appellant argues that Herlin in view of Jaisimha in view of Bluetooth Security specification Version 1.0B does not teach for generating a link key for encryption and decryption for data communication by merging the first key with the second key

The examiner asserts that Herlin in view of Jaisimha in view of Bluetooth teaches using a first key and a second key and merging them in an XOR fashion to create a new link key.

The Bluetooth specification is merely relied on for this key combination method. The key combination method would be obvious to one of ordinary skill in the art because by combining both keys the security of the link key is enhances, ie. if one key is captured over the network, it cannot be used to compromise the system.

#### **IV.**

**Appealed Claim 8**

The appellant argues the Herlin in view of Jaisimha in view of Holloway does not teaches encrypting the second key with the first key.

The examiner asserts that Holloway teaches encrypting one key with another and sending it to a recipient. It would have been obvious to one of ordinary skill in the art to use k1 of Herlin as the key encrypting key of k2 because it is a one time key and would increase security, this knowledge would have been generally available to one of ordinary skill in the art.

**V.**

**Appealed Claim 10**

The appellant argues the Herlin in view of Jaisimha in view of Crane does not teach an API for informing the consumer device about the protection status of another consumer device.

The examiner asserts that Crane teaches an API for managing digital certificates and keys for security services. In combination with Herlin and Jaisimha the API would inform the other consumer devices about protection status by managing the keys and authentication process.

**VI.**

**Appealed Claim 18**

The appellant argues the Herlin in view of Jaisimha in view of Moskowitz does not teach determining a compliance level further comprises determining rights placed on the content to be transferred. The examiner asserts that the process of authentication used in determines a basic level of compliance Moskowitz teaches the further restriction of authorization rights to determine a further level of compliance.

**Appealed Claim 20**

The appellant argues the Herlin in view of Jaisimha in view of Moskowitz does not teach, wherein when the subsequent authentication is performed that the downloading of the audio visual content is limited in quality.

The examiner, as previously asserted, argues that the authentication and authorization rights performed determine a level of compliance, and Mosowitz teaches that the level of compliance determines limiting the quality of media

It would have been obvious to one of ordinary skill in the art to use the reduced quality media with the security of the Herlin-Jaisimha combination because it allows for unauthorized users to sample a product before deciding to purchase it.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.



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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Respectfully submitted,

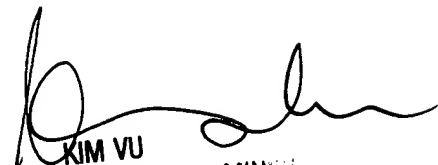
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